Noxious Weed Survey Program

Ten sections will be randomly selected for each county. This represents approximately 1% of the land area for an average county. Other states have found that an accurate survey of 1% is sufficient to project reasonable estimates for the entire county. Please remember, the survey program is designed to fulfill the statutory requirement of reporting the approximate acreage of each noxious weed and is separate from the duty to investigate reports of noxious weed infestations and to carry out a program designed to control all of the noxious weeds in the county. The following guidelines will assist you in implementing an effective survey program.

- I. You will be sent a list of section numbers, as in the past, to survey for the year. If the randomly selected sections do not reflect the general land use of the county, please call and we will work with you to make adjustments. Example: If most of the sections selected are in rangeland and most of the land use in the county is cropland, we would make adjustments to achieve a balance that more accurately reflects the nature of the county.
- II. It is suggested you obtain or purchase aerial photos of each section surveyed. Aerial maps can be obtained from your county GIS department, FSA/NRCS office, or through an appropriate internet source (i.e. Google Earth, Microsoft Virtual Earth, etc.) Use the aerial photo to determine the acreage of each field and mark where the noxious weeds are located. The aerial photo will be very helpful in accurately plotting the noxious weed infestations and serve as a useful record for enforcement and monitoring the infestation.
- III. You will likely need to survey each section several times during the year. Report the crop that is growing during the growing season. Example: Winter wheat planted the previous fall would be reported as wheat, even though the field will be fallow during part of the growing season or possibly double cropped during the later part of the season. If the field is fallow in the summer and will be planted to wheat in the fall, consider the crop as fallow land. An early season survey is recommended n crop land to note weeds, such as field bindweed, that may be obscured by a growing crop later in the season.
- IV. Report acres invested based on the number of acres that need to be treated to control the infestation. If the noxious weed is scattered over the entire field to the point where treatment of the entire field is necessary to control the infestation, then report the entire field as infested. If the noxious weeds may be controlled by spot treatment or are only located in one portion of the field, report the number of acres that would be treated to control the infestation. This is and always will be a judgment call on the part of the surveyor. If the weeds are being controlled successfully, at some point in time the infestation should move from solid treatment to spot treatment and the number of acres infested reduced accordingly.

V. Summarize your monthly survey work for each weed on the work sheets provided. At the end of the season, it should be a simple task to total the columns, calculate the estimated infestation and modify that estimate if you feel it is in error. The total acreage surveyed will always be the number of times you visited the section. If you surveyed all 10 sections, the acres surveyed will be 6400 acres, even though you walked across each section twice.

Example: At the end of the year you found a total of 245 acres of field bindweed in wheat. You surveyed all 10 sections (6400 acres) and the total acreage of all of the land in your county is 576,000 acres.

(acreage infested) divided by 6,400 acres X 576,000 = estimate

$$\frac{245}{640} = 0.0382812$$

0.0382812 * 576,000 = 22,050 acres of field bindweed in wheat

In this example, enter 22,050 in the Estimated Acreage Infested column. If, based upon your knowledge of field bindweed in your county, you feel the actual acreage of field bindweed in wheat is less than or more than 22,050 acres adjust the amount accordingly. Example: Based upon sales of herbicides, contact with landowners and previous surveys you feel that 15,000 acres of field bindweed in wheat is a more accurate estimate. You would put 15,000 acres in the Weed Director's Adjustment of Est. Ac. column. Use your adjusted acres on page 2 of the annual report.

Please Note: Noxious weeds known to be in the county but not detected by the survey will be reported on the Annual Weed Eradication Report by entering a director's adjustment!!